The Air Toxics Program: Urban Air Toxics Strategy

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The Air Toxics Program

- Designed to characterize, prioritize, and equitably address the serious impacts of hazardous air pollutants on public health and the environment through a strategic combination of:
  - regulatory approaches
  - voluntary partnerships
  - ongoing research and assessments
  - education and outreach

Components of the Air Toxics Program

- **Source-specific standards and sector-based standards**
  - MACT (Sections 112 and 129)
  - Residual Risk
  - Utilities Study
- **National, regional, community-based initiatives to focus on multimedia and cumulative risks**
  - Integrated Urban Air Toxics Strategy
  - Great Waters
  - Mercury initiatives
  - PBT and TMDL initiatives
  - Clean Air Partnerships
- **National air toxics assessments (NATA)**
  - Emission inventories
  - Monitoring network
- **Educational outreach**
  - Air quality, exposure, and risk modeling
  - Ongoing research on effects and assessment tools

Current GPRA GOAL

- By 2010, reduce air toxic emissions by 75% from 1993 levels to significantly reduce the risk of the population of cancer and other serious adverse health effects caused by airborne toxics

Future GPRA Goal (draft)

- By 2015-2020, eliminate unacceptable risks of cancer and other significant health problems from air toxic emissions for at least 95% of the population and substantially reduce or eliminate adverse effects on our natural environment.

Urban Air Toxics Strategy

- Signed July 6, 1999 and published on July 19, 1999
- Urban Strategy is one part of the National Program to address air toxics

Urban Air Toxics Strategy: Goals

- 75% reduction in cancer "incidence"
  - Scope - all air toxics, stationary sources, urban areas nationwide, all laws
- "Substantial" reduction in noncancer risks
  - Scope - all air toxics, area sources, urban areas nationwide, all laws
- Address disproportionate risk
  - Scope - all air toxics, emission sources (area, major, mobile sources)

Urban Air Toxics Strategy: Components

- Standard setting
  - List of 33 HAPs
  - List of 13 new area source categories
  - 202(l) standards and low sulfur diesel regulations
  - Reflect activities for residual risk and the 10 year standards
- Cumulative risk initiatives
  - National, regional and local scale activities
  - Community level Pilot Projects

Urban Air Toxics Strategy: Components *(continued)*

- Assessments
  - Phased assessments
  - first step in Summer 2000
  - Monitoring network
- Education and Outreach

What's Next

- Standards
  - Mobile source standards first
  - Area source standards by 2004
- Assessments
  - National scope, Air quality and exposure modeling
  - Local scale assesments in the future
- Cumulative risk initiatives
  - Work with Mayor's, State, local and Tribal agencies to plan local risk pilots
  - Identifying initial area for a pilot project
- Education and Outreach
  - Satellite broadcasts, Brochures, website
  - Stakeholder process
- Indoor Air Toxics Strategy released 8/00

Mobile Source Strategy

- Mobile sources are significant contributors to urban toxics emissions inventories
- Many compounds and elements are known to be emitted by motor vehicles
- There are 3 primary ways to reduce emissions of mobile source air toxics:
  - Fuel controls
  - engine controls
  - reduction of vehicle miles traveled

Mobile Source Strategy: Standards Under Development

- Heavy Duty Diesel Engines (mid 2000)
  - final rule that reconfirms 2004 standards for heavy duty diesels
  - proposal to control sulfur in diesel fuel and establish more stringent standards for heavy duty vehicles and engines
- Tier 2 Rule (final 12/99)
  - new stringent emission standards and gasoline sulfur controls from light duty vehicles and trucks

Mobile Source Strategy: Standards Under Development (continued)

- Tier 3 Non-Road Diesel
  - propose late 2000/finalize 2001
  - non-road diesel fuel controls and emissions standards for non-road diesel engines
- Section 202(l) Rule
  - propose July 2000/finalize Dec 2000
  - will designate motor vehicle air toxics and consider control options

Area Source Category list

- Act requires 90% of the emissions of each of the 30 area source HAPs to be "subject to standards"
- Used a two step process
  - identified area source categories already subject to standards
  - identified area source categories that contribute 15% to any one HAP
- The list identifies:
  - 29 source categories
    - 16 currently regulated
    - 13 requiring new regulation

Area source standards

- Options: How to develop standards
  - MACT
  - Traditional GACT
  - Flexible GACT
- Options: Where standards apply
  - National standards apply everywhere
  - National standards may apply only in urban areas

NATA: What is it?

- Development of analytical tools to:
  - identify areas of concern
  - improve characterization of risks and risk reductions for stationary and mobile sources
  - track our progress and prioritize efforts

- To be accomplished through:
  - emission inventories development
  - monitoring networks
  - modeling

Other Activities

- Identify research needs
- Work in partnerships with State, local and tribal governments to develop programs that address goals of urban strategy
- Federal Advisory Committee Act (FACA)
- Initiate pilot projects with the Office of Indoor Air
- Education and outreach

Indoor Air

- Both indoor and outdoor air exposures to air toxics are important

- Indoor air and outdoor air are interdependent
  - outdoor air toxics set baseline level indoors
  - outdoor air toxics infiltrate or are ventilated indoors
  - indoor emissions are ventilated outdoors

Indoor Air: Integrated Strategy

- For meaningful reduction of risks, we must address ***BOTH*** indoor and outdoor sources of air toxics

- Will do this through:
  - timing of joint strategies to reduce air toxics
  - joint communications and coordination
  - joint project(s)
    - pilot study in one community

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For More Information on Air Toxics

- Visit the following websites:
  - EPA's Office of Air and Radiation (OAR)
    - www.epa.gov/oar
  - Unified Air Toxics Website (UATW)
    - www.epa.gov.ttn/uatw
  - OAR Policy & Guidance Website
    - provides access to OAR rules, policies, and guidance documents
    - www.epa.gov/ttn/oarpg